

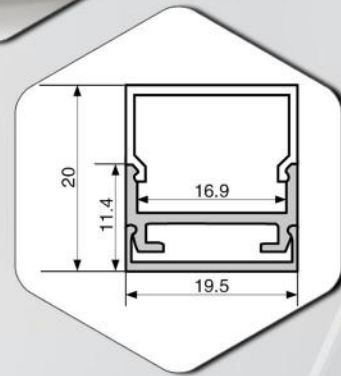
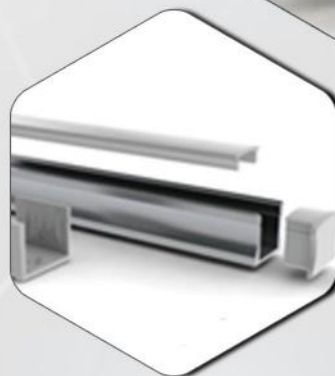
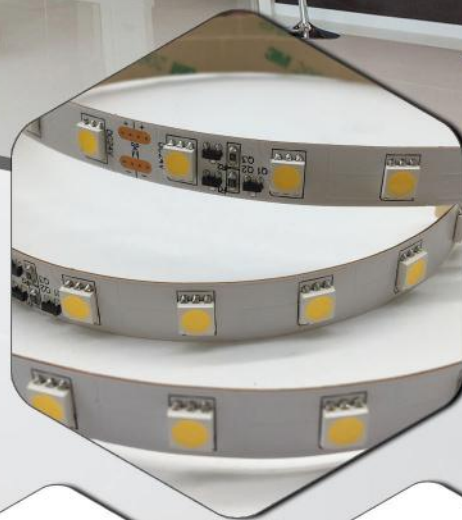


# light rail

## LTB 60

### DESCRIPTION

- SMD EPISTAR 5050 LED chip
- Supplied in 5m, 7.5m, 10m rolls or custom lengths with special length leads and / or connectors available
- Constant current for even light distribution across longer distances
- Working current: 60mA
- Maximum rating: 90mA
- Working temperature -30 to +60 deg C
- Thermal protection over 40 deg via temperature sensor
- Cut every 100mm
- 24v DC constant voltage supply
- CRI>85



Name	Code	LED pm	Lm/m (approx.)	Voltage DC	Watts pm	Width (mm)	CRI
LTB60 2700K	LTB60WW27K	60	950	24	14.4	10	>85
LTB60 3000K	LTB60WW3K	60	1030	24	14.4	10	>85
LTB60 4200K	LTB60CW	60	1100	24	14.4	10	>85
LTB60 6000K	LTB60DL	60	1150	24	14.4	10	>85
LTB60 RGB	LT60 RGB	60	X	24	14.4	12	>85
Weatherproof code add	IP65, IP67, IP68					IP68 12mm	

Max run 10m wires one end  
Lumens shown do not include installation into any LED profile



## LED STRIP DETAIL

- \* LED type: Epistar SMD 3528 LED
- \* LED Qty: 60LEDs/m
- \* PCB Dimension: 5000/7500/10000x10x0.2mm
- \* Voltage: 24v DC
- \* Max power: 14.4w/m
- \* IP rating: IP20/IP65/IP67/IP68
- \* Lifetime: 50000h
- \* CRI > 85 Ra

## TEMPERATURE CONTROL

Temp. Control: If the temperature of the LED strip is below 40°C the current will stay at 60mA.

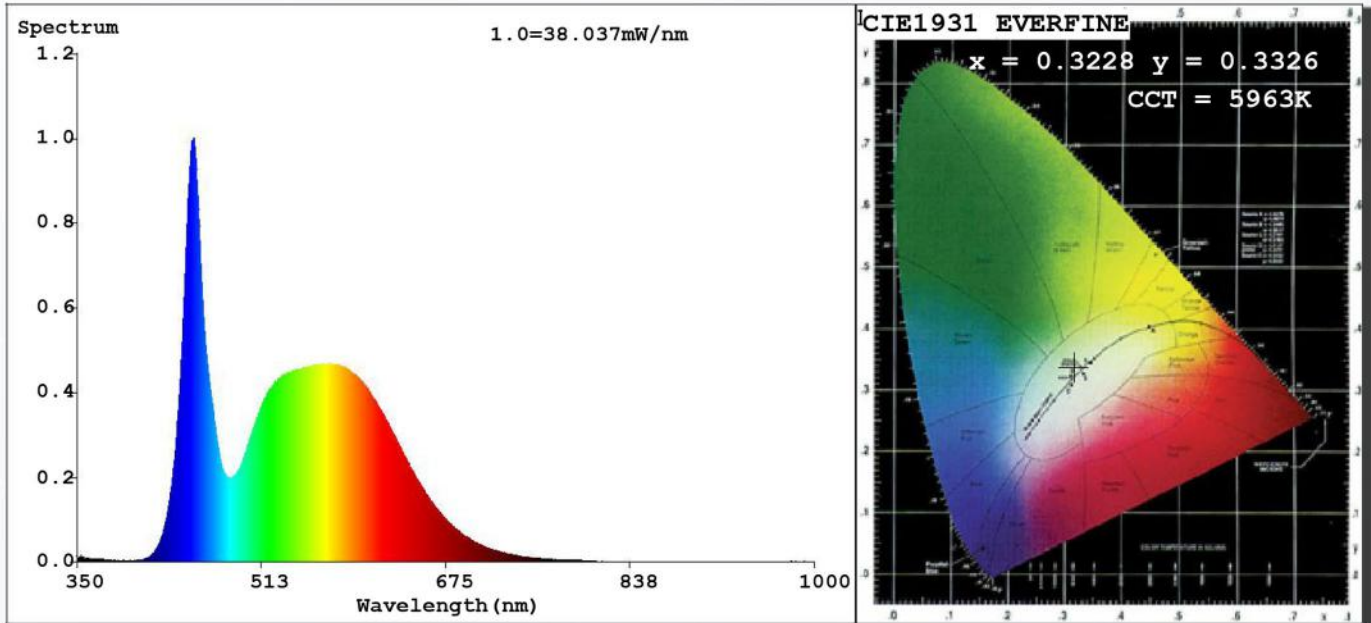
When the temp. of the LED strip rises above 40°C the sensor inside the IC will start working to lower the current.

Normally the balance point is 45°C, where the working current will be 56-58mA and 95% lumen output.

If the surrounding temperature is high, such as 60°C the balance point will become 60°C and the current will be 53-55mA and 80-85% lumen output.

## APPLICATION EXAMPLES





## COLOR PARAMETERS:

**Chromaticity Coordinate:**  $x=0.3228$   $y=0.3326$   $u'=0.2034$   $v'=0.4717$   
 CCT=5963K(Duv=0.0001) Dominant WL:Ld =490.8nm Purity=3.6%

Ratio:R=14.4% G=80.5% B=5. Peak WL:Lp=453.3nm FWHM=21.5nm

**Render Index:** Ra=83.2 CRI=76.0 AvgR=76.2  
 R1 =82 R2 =88 R3 =90 R4 =83 R5 =82 R6 =82 R7 =88  
 R8 =71 R9 =13 R10=69 R11=82 R12=56 R13=84 R14=94 R15=79

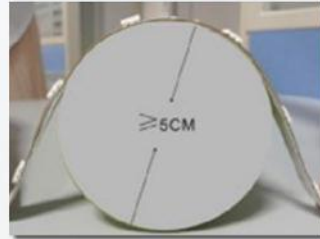
**Photo Parameters:**  
 Flux = 1147 lm Eff. : 81.29 lm/W Fe = 4.70 W

**Electrical parameters:**  
 V = 23.998 V I = 0.5878 A P = 14.11 W PF = 1.000

**LEVEL:** OUT **WHITE:** ANSI\_5700K  
 Status: Integral T = 875 ms Ip = 46934 (72%)

## WARNINGS

- Do not install while the electrical cables are live
- Do not touch or press the LED surface during transportation and installation
- Do not power up the strips before taking them off the roll
- Do not install the strip under direct sun light
- The strip is highly flexible but requires a bending diameter  $\geq 5\text{cm}$  (see picture 1) during installation.
- Do not bend the strip as shown in picture 2



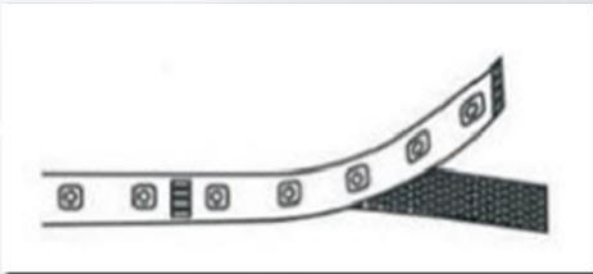
Picture 1: maximum bending dia  $\geq 5\text{cm}$



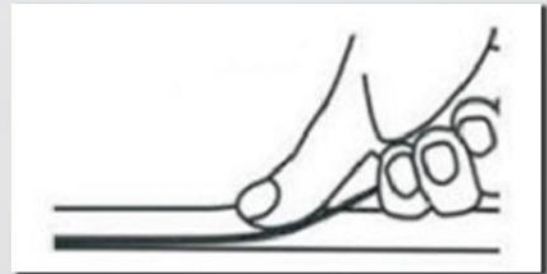
Picture 2: do not bend as shown

## CONNECTION DIAGRAM

- Clean installation surface before installing
- Installation guide below with 3M double sided adhesive tape



Remove the release paper



Stick to the installation surface

## Technical Features:

Constant current IC	Resistors	LEDs
Brand: ALJ      Pack: SOT-23	Brand: FENCHUA	Brand: Epistar Chip
QTY: 2PCS	1. 0603 pack 564 (560K $\Omega$ )	Standard Lumen: 20-22 lm/LED
Function: Constant Current: This feature keeps the whole length of LED strip working at the current of 60Ma to a maximum 10m before a new cable entry is required	Function: protect the IC, limits the base current, prevent the current being too high and burning the IC	Working Current: 60 mA
	2. 0603 pack 10R5 (10.5 $\Omega$ )	Maximum rating for working current is 90mA
		CRI: >85